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STRATEGY RESEARCH PROJECT

# FORCE PROJECTION RESEARCH AND DEVELOPMENT: THE KEY ENABLER FOR ARMY TRANSFORMATION

BY

COLONEL GENARO J. DELLAROCCO United States Army

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# FORCE PROJECTION RESEARCH AND DEVELOPMENT: THE KEY ENABLER FOR ARMY TRANSFORMATION

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#### **ABSTRACT**

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The intent of this research project is to create irreversible momentum for improving the Army's force projection competency and its strategic agility as articulated in the new Army Vision. The test for any new vision is demonstrated commitment and adequate resources. Without adequate resources, the vision becomes just a wish. The project illustrates that force projection remains the Army's Achilles heel and examines the role it plays in Joint Vision 2020. The key resource required in this case is a viable research and development program and supported by organizational changes. There are four areas for focused R&D. These focus areas are 'lighten for force', 'shrink the tail', 'get there faster', and the paradigm shifter – the Army truck as they affect the strategic agility of the force projection process. To gain long-term institutional commitment, the Army must direct four major organizational changes. The first two changes create new organizations, the Army Expeditionary Support Command (three-star command) and its Deputy for Systems Acquisition for Force Projection and Maneuver Sustainment (two-star command). The last two changes formally establish the Force Projection Center of Excellence and Council of Colonels. Lastly, the Army must train and exercise this perishable skill set – routinely.

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# **PREFACE**

There are several key people who guided and supported me through this endeavor. Starting with the faulty of the U.S. Army War College, Colonel Cortez Dial, Professor Tom Sweeney, Professor Mike Morin, and Professor Wick Murray who gave me expert direction. Colonel Mike Cannon, my old boss whom I am replacing, lit the force projection flame. Nothing happens in my life without the support of my loving spouse, Karen. Thank you all. Lastly, this strategic research project is a product of the U.S. Army War College's Advanced Strategic Arts Program – ASAP.

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# FORCE PROJECTION RESEARCH AND DEVELOPMENT: THE KEY ENABLER FOR ARMY TRANSFORMATION

The first task of strategy is the final assembly of the fighting forces, the first deployment of the army. Here, multifarious political, geographic, and national considerations come into question. A mistake in the original assembly of the army scarcely be [is] rectified in the entire course of the campaign.

-Helmuth von Moltke<sup>1</sup>

In the spring of 1998, the Army was ready to fight, but not ready to deploy. The Army's deployment during the Kosovo crisis illustrated that force projection remains its Achilles heel and signifies the presence of Cold War infrastructure and doctrine remnants. The Army has yet to make this a core a competency like the Navy, Marine Corps, and Air Force have already done. Kosovo inadvertently created a focus in the Army to rectify its strategic responsiveness and establish its value to deterrence. With a new Chief of Staff of the Army (CSA), a new vision came forth — one that puts the Army on the path to be a relevant, decisive force, based on faster force projection capabilities. To realize a vision, it requires adequately resourced research and development program. If not, the vision becomes nothing more than a wish.

# CREATING IRREVERSIBLE MOMENTUM FOR CHANGE

General Eric K. Shinseki fired the starting salvo for change by laying out a challenging vision for the Army on 12 October 1999<sup>2</sup>. That vision represents the catalyst for change. The new Army Vision reflects lessons from the past as well as the importance of strategic responsiveness for the Army in the face of future threats — to deter, compel, and reassure:

The Army will be responsive and dominant at every point on that spectrum. We will provide to the Nation an array of deployable, agile, versatile, lethal, survivable, and sustainable formations, which are affordable and capable of reversing the conditions of human suffering rapidly and resolving conflicts decisively. The Army's deployment is the surest sign of America's commitment to accomplishing any mission that occurs on land....3

To maintain the momentum for change, the vision requires a visible commitment and resources for execution. This paper argues that the vision must go beyond simply publishing briefings and elaborate websites. It must serve as the catalyst for changing the way the Army does business, and therefore it must change organizations Army-wide to focus on implementing the new vision. The first step began with the creation of two initial brigade combat teams (IBCT). While the point of this spear is already on the way to transformation, getting the new force to the battlefield and sustaining it remains another issue. The vision sets the deployment

mark on the wall at 96 hours for the brigade, 120 hours for the division, and 30 days for five divisions.<sup>5</sup> The Army, however, cannot accomplish this task alone. It must be part, the decisive part — the central part — of a joint task force (JTF). It must lead all future JTFs — or at least actively participate. Changing the Army's combat force structure and equipment is only a part of the solution. The force projection process requires attention and resources to accomplish the new goals of greater strategic responsiveness for the Army.

# NATIONAL MILITARY STRATEGY

The National Military Strategy rests on a national culture of winning wars not in North America, but on the enemy's soil.<sup>6</sup> The 1997 National Military Strategy recognizes the key importance of force projection. However, it was characterized in an earlier definition as power projection.<sup>7</sup> It requires the U.S. military to have the ability to respond to a full spectrum of crises under the concepts of strategic agility, overseas presence, power projection, and decisive force.<sup>8</sup> It asserts "swift action by military forces may sometimes be the best way to prevent, contain, or resolve conflict, thereby precluding greater effort and increased risk later."

Strategically, decisive force provides deterrence, compellance, and reassurance. <sup>10</sup> The U.S military can only accomplish these goals by means of effective force projection. A demonstrated force projection process capable of projecting a decisive force in a timely manner provides its own deterrence. In fact that capability can resolve or prevent crises before they escalate. Deterrence is most effective with enemies who recognize the capability of military decisive forces that U.S. political leaders can project quickly. <sup>11</sup>

The theory of decisive force surfaces in Joint Vision 2020 that forms the foundation of the next National Military Strategy update. That document states: "The overarching focus of this vision is full spectrum dominance — achieved through the interdependent application of dominant maneuver, precision engagement, focused logistics, and full dimensional protection." Decisive force, used with an enabling force projection operation, is both deterrence and response based on the ability to project necessary forces to achieve preservation of all aspects of land, sea, air, and space military power — in other words, strategic agility. 14

# FORCE PROJECTION PROCESS

Full spectrum operations will, demand precision and simultaneous logistics operations.

Consequentially, the force deployment process coupled with the maneuver sustainment process = the single force projection process. It is an operation and a process that flows through four transitional areas or phases: CONUS, Strategic Lift, Theater, and Tactical Area (see Figure 1). 15

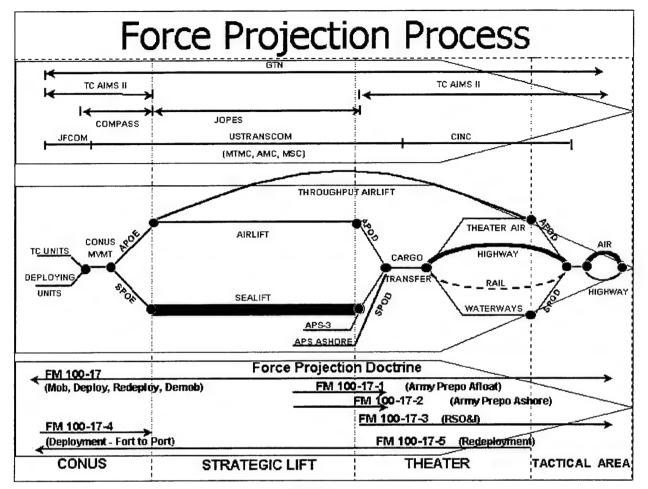


FIGURE 1

- In the CONUS phase, deploying units depart from home-station installations across
  the continental United States or from pre-positioned or forward-deployed locations.
  These units deploy from either aerial and/or sea ports of embarkation (APOE/SPOE).
- 2. Strategic lift basically consists of two modes of transportation: airlift and sealift managed by U.S. Transportation Command (USTRANSCOM) via the Service components of Air Mobility Command, Military Sealift Command, and the Military Traffic Management Command (MTMC). The strategic lift is the bridge that connects APOE/SPOE to aerial and/or seaports of debarkation (APOD/SPOD) in the next phase.
- 3. In the theater phase three important activities occur. These are: 1) the download or off-load of equipment and personnel at the APOD/SPOD; 2) when required, joint logistics over-the-shore operations (JLOTS);<sup>17</sup> and 3) reception, staging, onward movement, and integration operations (RSO&I).<sup>18</sup> In the deploying units, soldiers marry up with their equipment; and then move onto the next phase.

4. Units departing the RSO&I area move to the tactical area phase of the force projection process to conduct a wide range of military operations from combat to humanitarian assistance. Maneuver sustainment of deployed forces becomes increasing more important and becomes the primary mission of the force projection process while these units reside in this phase.

# RESEARCH AND DEVELOPMENT FOCUS

The Department of Defense (DoD) and Army's Strategic Mobility Program (ASMP) invested \$34 billion since Desert Storm to improve the first two legs of the process. Despite this investment, the Army will not reach the goal of deploying a five-division contingency corps force in C+75 days until 2005. Now, the CSA raised the goal to do the same at C+30 days. Using the current process, the Army will not meet these goals unless several improvements occur to achieve quicker throughput.

In order to improve the
Force Projection process, R&D
must occur in three basic areas.
They are: lighten for force,
shrink the tail, and get there
faster. To do this, a reallocation
of R&D funding needs to occur
with this new focus. Currently,
the majority of the Army's
Science and Technology funds
focus on lethality and
survivability (see Figure 2).<sup>20</sup> If
the Army Vision's strategic
responsiveness is to achieve reality,

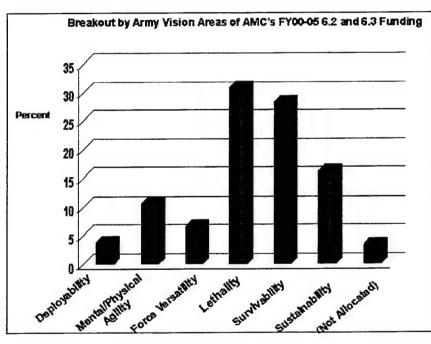


FIGURE 2

then more money are needed in the deployability areas to improve the force projection process.

# LIGHTEN THE FORCE

Of the three areas, lightening the force has received the most attention to date. Near term, the Interim Armored Vehicle (IAV) is the centerpiece of the R&D effort, followed by the objective force's future combat vehicle.<sup>21</sup> While efforts here will yield greater deployability, they alone will not achieve the 96-hour deployment goals set forth in the Army Vision. Work still needs to continue in this area.

One aspect to lightening the load is to put more combat punch or lethality into a smaller, more versatile package. A number of critics have argued that the requirement for new systems to be C-130 aircraft transportable is only there to enhance the intratheater warfighter agility of the Theater Commander-in Chief (CINC) and/or the JTF Commander. Actually, it is a forcing function that will cause new systems to be smaller and lighter. There is a common misunderstanding about the requirement for new systems, including the IAV. This requirement allows the initial, interim, and objective systems to be transported on larger systems more readily as well as resulting in improved strategic and operational agility.<sup>22</sup>

#### SHRINK THE TAIL

The goal here is to minimize the logistics footprint on the battlefield. This may not directly translate into a smaller CONUS logistics base to support force projection operations. There is a set infrastructure required to support all force projection and maneuver sustainment operations. However, there are several areas that can reduce the footprint.

Since Desert Storm, the Army made significant progress in the information management area that supports force projection operations. They focus on Total Asset Visibility and Intransit Visibility. Improved logistics information will allow the Army to send only essential materiel to a JTF. That action alone will substantially reduce the logistics footprint.

The three most difficult commodities to sustain a force from a logistics standpoint are ammunition, fuel, and water. R&D efforts need to focus on these areas intensely. Ammunition lethality, i.e., one shot one kill, will only help to reduce the logistics stain if the warfighter gains confidence in that claim. The process must be responsive and demonstrate that ability using strategic configured loads to build that confidence.<sup>23</sup>

In the fuels area, reducing the size of the footprint will require converting legacy vehicles to more fuel-efficient engines and capitalize on the commercial sector's evolution of new engines. R&D dollars need to be invested into the conversion of military vehicles to these new commercial power plants. Battlefield distribution of fuel is still a problem, as the legacy and interim forces will remain wedded to fossil fuels for at least the next 30 years. R&D efforts are necessary to ensure that efficient fuel distribution enroute to and on the battlefield are commensurate with the Army's Title 10 responsibility for inland theater fuel distribution to all Services.

Water presents similar challenges as fuel, as it too is a bulk liquid. However, sources for water are sometimes readily available within theaters, which drives the requirement for purifying water near, or within the theater of operations. The primary challenge for water is its battlefield

distribution. R&D efforts need to create an actual battlefield water distribution system down to the foxhole.<sup>24</sup>

Another aspect of the C-130 transportability requirement that is overlooked is the impact on reducing the logistics footprint. The smaller and lighter the new systems are the less sustainment is required, i.e., lower fuel consumption and less handling equipment. This requirement is a forcing function to maximize strategic and operational agility as it forces down sustainment requirements. This aspect needs more emphasis, particularly with Congress.<sup>25</sup>

#### GET THERE FASTER

Getting there faster means quicker throughput. The force projection process consists of modes of transportation (air, sea, and surface) punctuated with intermodal nodes (forts, POEs, PODs, and RSO&I). The first modes addressed are strategic lift.

DoD needs more C-17s.<sup>26</sup> Several simulations support this assertion as well as the General Accounting Office's report that military airlift is 30 percent short to support the current national military strategy.<sup>27</sup> In the near term, the U.S. Air Force is promoting civilianizing the C-17 for the commercial sector. This would add a substantially new capability to the Civilian Reserve Air Fleet (CRAF). Meanwhile, Boeing, maker of the C-17, is retrofitting and building new C-17s with extended range capacity –increased 20-30 percent.<sup>28</sup>

The commercial sector is creating a new aspect of the global transportation market by developing a class of aerial transport vehicles that can deliver much greater tonnage than other current aircraft. This sector is now developing ultra-large aircraft concepts and prototypes.<sup>29</sup> These new heavy lifters would satisfy the commercial need to move goods to markets more quickly in the global environment.<sup>30</sup> The objective transport tonnage exceeds 1000 short tons per lift. The impact here of R&D dollars would ensure that manufactures incorporate military interface requirements into the initial commercial designs.

What are the implications of such capabilities? The idea is that these systems would be available to the military in peacetime via normal contract channels and in time of crisis via CRAF.<sup>31</sup> Additionally, it would restructure the war reserves currently carried onboard ships and would establish a CONUS-based prepositioned material configured to unit sets (POMCUS) near large remote airfields. This approached could substantially reduce costs while improving the strategic responsiveness of forces and their equipment.<sup>32</sup>

The next generation heavy lifters will include the Advanced Tactical Transport (ATT) to replace the C-130 fleet.<sup>33</sup> For new systems, C-130 requirements were changed slightly to only 'fit' within the C-130 envelope to accommodate ATT development. The recent DoD 'Quick

Look' indicates that the Army should invest in ATT with the capability of large heavy cargo with very short take-off and land capability. Investment in this area would allow DoD to retire the C-130 legacy system within 10-15 years. <sup>34</sup>

The other aspect of the next generation modal transportation relies on ports or over-the-shore operations. The shipping industry is developing shallow-draft and high-speed sealift that can attain double or triple the speed currently experienced with our logistics support vessels and fast sailing ships. This future capability would provide the strategic agility to project medium and heavy forces into restricted areas of operation. Our R&D will complement the commercial ocean shipping sector's desire to identify and accommodate military interface requirements, also.<sup>35</sup>

To increase throughput, R&D must look at the nodes of the Force Projection process. This is where there is a change in mode of transportation, i.e., a physical handling of cargo. Anything that can minimize the material handling of cargo needs to be the focus of Army R&D. This effort must also encompass improvements to bypass traditional ports of debarkation (airports and seaports) and must improve the current JLOTS capability. This will ensure throughput to a JTF when conventional or asymmetrical enemy forces deny ports.<sup>36</sup>

# SHIFT THAT PARADIGM

It is time to shift an old paradigm into a new gear by examining a new aspect on an old system that would potentially lighten the force, shrink the logistics tail, help get there faster, and improve throughput. It is the truck's role in the force projection process. Currently, trucks cannot operate autonomously. Some models have come close with on-board handling systems like the Palletized Loading System (PLS) and on-board small cranes and forklifts. However, such trucks were designed to handle specific battlefield distribution functions and remain limited to certain parts of the land battlefield.

What is needed is a truck with the next generation load handling system (LHS) that can handle the container roll-out platform (CROP), 20 foot standard containers, - and 463L pallets.<sup>37</sup> The BCT Organization and Operations (O&O) Concept infers the need for such a truck. According to this concept, the IBCT (and the Objective Force) will deploy using both 463L pallets and CROPs in a force projection operation. Both platforms and containers will sustain the force.<sup>38</sup> The BCT is equipped to handle CROPs with 106 PLS trucks and heavy expanded mobility tactical trucks (HEMTT) LHS vehicles and 20-foot containers with the addition of five container-handling kits. The 463L handling capability of the BCT remains limited to its six organic forklifts.<sup>39</sup> The new advanced LHS (ALHS) would have the capability to handle all three

platforms with each vehicle equipped with the system.<sup>40</sup> This means ALHS trucks could load/unload Air Force cargo aircraft directly without the aid of forklifts or K-loaders; to transload cargo; and to load/unload itself. It would also need to be lightweight and sized to fit in the C-130 envelope. The ALHS would be a modular system integrated into semi-trailers, commercial vehicles, and tactical trucks.<sup>41</sup>

There is limited research ongoing with current platforms to improve APOD throughput from two perspectives. The first concerns the C-17. Boeing is developing, separately and in conjunction, with the Army's Tank-automotive Armaments Command (TACOM) and the Air Force, concepts for eliminating the need of K-loaders and forklifts. These concepts focus on building this capability into the C-17 and range from the patented articulating ramp tailgate that can load and unload 463L pallets onto a truck or trailer, to an internal crane that will do the same for 20-foot containers. The second area concerns PLS/LHS trucks and something called the "Slipper." This R&D team built a prototyped device that allows these trucks to load and unload the CROP directly from a C-17 without using a K-loader or forklift. The paradigm shift is starting — where some day soon, Air Force planes will be offloaded directly by the Army soldier and his or her truck — another example of the 'Army of One' capability.

The potential impact of the ALHS on ports of debarkation, RSO&I operations, and battlefield ground distribution is substantial. Using the objective brigade combat team (OBCT) as the example, the ALHS would be integrated directly into 242 applicable PLS, HEMTT, and medium tactical vehicles. At APODs, Army ALHS equipped vehicles would eliminate the need for the Air Force to bring in tactical K-loaders and forklifts, thus reducing sortie requirements. Further, ALHS increases the density of aircraft offloading trucks where most units of the OBCT would have organic ALHS-equipped vehicles. Air Force cargo aircraft would off-load quicker and cargo clears the airhead immediately. Consequently, reduced aircraft turnaround times allow more sorties to land at a given airfield within a 24-hour period.

The high density, expanded platform handling, and organic features of ALHS trucks would speed cargo clearance through ocean terminals and RSO&I activities to allow greater throughput to combat units on the battlefield. For high volume fort, POE, POD, and RSO&I operations, the ALHS equipped line-haul semi-trailers would add new efficiencies as they load, transload and unload themselves without the aid of forklifts and most container handlers. While it is doubtful that the ALHS will completely replace forklifts and K-loaders, the system shrinks the logistics footprint; maximizes the truck fleet already part of the force structure; maximizes battlefield distribution; improves airhead cargo clearance; and speed deployment throughput.

So, what is needed to determine requirements? First, the Army needs to develop a battlefield (fort to foxhole) simulation with the fidelity to determine the optimum size platform for a combat unit to handle with ease. Despite the fact that there are numerous simulations that address various aspects of the process, there is not one comprehensive enough with sufficient fidelity to examine all the internal aspects of the nodes in the force projection process. <sup>46</sup> Is the answer the CROP or is something smaller needed? Does the 463L pallet and system need modernization? Can both platforms still be used? This reexamination would then drive the requirements for an ALHS. Can the current PLS be modified or does it require a different design entirely? An adequately funded joint R&D venture with the commercial sector (via the National Automotive Center) or through the U.S. Army Training and Doctrine Command's Concept Experimentation Program can answer these questions. <sup>47</sup>

# **NEW ORGANIZATIONAL TRANSFORMATIONS**

The first part of showing commitment to creating irreversible momentum for a new vision is to change or realign organizations to fit or support the new vision. After the Gulf War, the Army Strategic Mobility Program (ASMP) and its Power Projection Council of Colonels provided the organizational synergy that created the momentum for the vision of its day. They accomplished a great deal for the Army and DoD.<sup>48</sup>

The Army is entering a new era of uncertainty with a new vision that addresses the new global environment. A vision that will transform not only the Army, but will be the catalyst for transformation in the other Services as well. The CSA took the first step by creating a new combat entity called the IBCT. This organization is the precursor to the objective force in the coming years. However, his work is not done if he wishes to complete the transformation of the Army. To gain more commitment and create irreversible momentum for this new vision, the Army requires larger organizational change.

For R&D, this change is crucial in order to harness and focus the energies of widely dispersed interests. There are over eighty organizations that play a role in the force projection process. Nevertheless, there is no consistent organizational focus to provide direction and steward scarce resources among these organizations.<sup>49</sup> Consequentially, the effort to improve the force projection capability of the Army remains diluted, both structurally and developmentally. It is time to move beyond the organizations of the last war and create a single point of contact for force projection, maneuver sustainment, and distribution in order to be ready for the next conflict. <sup>50</sup>

In order to do this, the Army needs to make four major organizational changes to support the initial force structure developments illustrated by the IBCT. They are:

- Create an Army Expeditionary Support Command (AESC).
- Create a Deputy for Systems Acquisition (DSA) reporting to the Commander,
   AESC that acts as a Program Executive Office (PEO) for Force Projection and
   Maneuver Sustainment.
- Formally establish the Force Projection Center of Excellence.
- Change the name and focus of the Power Projection Council of Colonels to the Force Projection Council of Colonels.

# ARMY MATERIEL COMMAND TRANSFORMATION

In its current form, the Army Materiel Command (AMC) organization suboptimizes its vast resources in both supporting Army Transformation and transforming itself into a warfighter-relevant enterprise. There is a perception in the Warfighter community that AMC is not contributing enough and not committed to Army Transformation. This perception ranges from no visible role to just the aspect of Interim Armored Vehicle (IAV) involvement. Additionally, the AMC organization is viewed as a vast outdated monolith deeply rooted in wholesale logistics and rigid institutional practices that have lost touch with the Warfighter. These perceptions may be misinformed, but nonetheless widespread. <sup>51</sup> Despite these perceptions, the AMC Commander asserts, "Army Transformation cannot happen without AMC!" <sup>52</sup>

So, what does AMC need to do? Rebuild the linkage to Warfighter and focus on Jointness. First continue its current support, but be more visible and vocal. Second, AMC must fundamentally transform itself. AMC must visibly change itself, adapt to new missions and begin the process by becoming a maneuver support operator. In both cases, it will take strong leadership to overcome the many institutional barriers and change-resistant mindsets found within the Army Materiel Command. Change will need to have genesis from outside AMC, directed by Army senior leadership and progress toward an end state measured at the Readiness Review Committee level venues.

Start the AMC transformation by creating the Army Expeditionary Support Command, a three-star level AMC command (dual hatted as the Deputy AMC Commander) that focuses on the force projection and distribution processes that supports Army expeditionary forces (see Figure 3). Its mission:<sup>53</sup>

- Integrate development, transportation, distribution, and maneuver sustainment functions to achieve the Army Vision of strategic responsiveness via improving and executing the force projection process.
- Assist CINC, JTF, Army Service Component Command (ASCC), Commander Army Forces (COMARFOR), and Joint Forces Land Component Commander (JFLCC) planners in the force projection, distribution, and maneuver sustainment of Army Legacy, Interim, and Objective forces.
- Support the Army role in Joint Force Projection Operations and serve as Army
  Operational Focal Point for the Process inside the Army and with the other Services,
  CINCs, Joint Staff, DoD, and Defense Logistics Agency (DLA).
- Provide the force projection platform for the Objective Force's Expeditionary Support Forces (ESF).

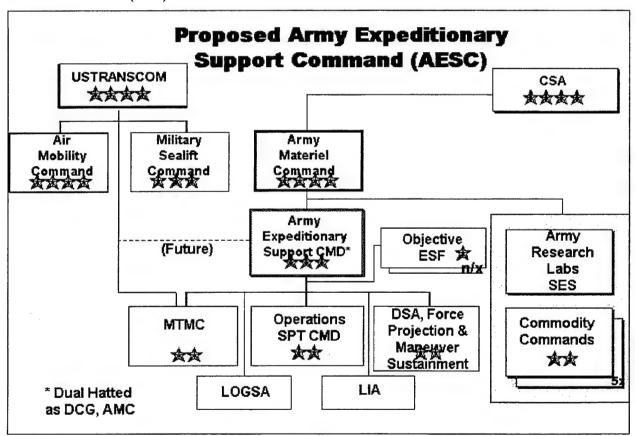


FIGURE 3.

The command would have three two-star commands: Military Traffic Management Command (MTMC), Operations Support Command (OSC), and AESC Deputy for Systems Acquisition (DSA) for Force Projection and Maneuver Sustainment (new). Both MTMC and

OSC would incorporate their extant subordinate organizations including their one-star commands, Deployment Support Command (DSC) and Field Support Command (FSC). Additionally, the Logistics Integration Agency (LIA) and Logistics Support Activity (LOGSA) would be assigned to the AESC. Lastly, the Objective Force ESFs, one-star commands, would be assigned as separate direct reports to AESC when not deployed to a Theater Support Command (TSC). <sup>54</sup> The benefits of creating the Army Expeditionary Support Command would be as follows:

- The MTMC's DSC is the complement of OSC's FSC in that the DSC enables the
  force projection process of deploying war reserves at the POEs and PODs. Note,
  the FSC is responsible for all of the Army's war reserves, CONUS, OCONUS and
  afloat. MTMC maintains its current relationship with the current USTRANSCOM
  organization.
- LOGSA handles all of the transactions through its vast information systems, data management and analytical support capabilities and supports deployments with its deployable Logistics Support Elements (LSE).
- LIA provides critical strategic logistics planning, handles the war reserves
  requirements process, and conducts its logistics R&D in coordination with the DSA
  Force Projection and Maneuver Sustainment. LIA maintains its current level of
  support to the Army's Deputy Chief of Staff for Logistics.
- With the three-star level command within AMC, the AESC can achieve additional
  synergies with the rest of the AMC two-star commodities commands. It would
  produce better coordination between the sustainment, development, transportation,
  and expeditionary functional areas. At this level it becomes the catalyst to foster
  cooperation and teamwork between the highly institutionalized commodity
  commands. This will be the AESC Commander's greatest challenge. Achieving
  internal AESC synergies will seem easy in comparison.
- For the Vice Chief of Staff of the Army, the transfer of the MTMC to AMC eliminates
  a direct report organization to HQDA and places an operating two-star command
  within an operating four-star command with a new expeditionary support mission
  focused on the joint warfighter.
- The addition of transportation functions complements the current AMC sustainment and war reserve responsibilities. In effect, it creates the distribution command function within AMC that allows control and improvements to force projection operational throughput and reduces the logistics footprint in the joint operations area.

- This organizational combination would serve as the first step to the National Defense Panel Report recommending the creation of a Logistics Command at the CINC level.
   It suggests that USTRANSCOM and DLA be combined into a single command.<sup>55</sup>
   DoD can capture the lessons learned from the Army level restructuring before proceeding with this recommendation at the DoD level.
- The Army would be on equal footing with the other Services in regard to USTRANSCOM. AMC would be at the same three/four-star level as the Navy's Military Sealift Command and the Air Force's Air Mobility Command. Given this equal footing, it provides a new opportunity for Army logistics three-star generals to obtain the four-star level and to be a CINC (which does not exist today). The Army is loosing too many high caliber three-star logistics generals because there is only one four-star position open to them. This action creates a second opportunity.
- Lastly, the AESC provides AMC a new focus, new mission, for transforming itself, gets closer to the both the Army and Joint warfighter and demonstrates a solid commitment to the Army's Transformation.

# FORCE PROJECTION AND MANEUVER SUSTAINMENT

The Army needs to create a DSA for Force Projection and Maneuver Sustainment that focuses on the deployment and logistics/distribution systems which impact the Army's ability to deploy, force project, distribute, and sustain not only the legacy force, but the interim force and the objective force. This PEO-like organization would have both a non-traditional and an operational focus. It would pull together all aspects of the materiel development of the force projection and maneuver sustainment enablers to modernize, develop, acquire, and field such systems. Many are the same for both areas. It would develop key synergies with MTMC, OSC, LOGSA, and LIA.

These systems would include watercraft, all types of trucks and trailers, locomotives and railcars, materiel handling equipment, construction equipment, port opening equipment, air transport systems (current and future), air drop systems, aerial delivery equipment and platforms, water purification and distribution systems, petroleum distribution systems, applicable soldier support systems (i.e. Force Provider) and logistics command and control information systems. Additionally, it serves as the recipient for formally transitioned R&D projects (when ready) to become legitimate development and acquisition programs from engineering centers, Logistics Integration Agency, Army Research Labs, and the Defense Advanced Research

Projects Agency. The Logistics Civil Augmentation Program would be a part of the DSA to leverage the acquisition process synergies to support its operational mission.

Create the appropriate project and product level management (PM) organizations to specifically focus on complementary force projection and maneuver sustainment process with in this DSA. The new PMs and support organizations would provide a concentrated and synergistic focus on the development acquisition and sustainment of the materiel needed to improve each process and allows the DSA to employ a systems of systems approach to meet the Army Vision targets. However, the systems it would manage would come from all AMC commodity commands and subsequently producing a geographically dispersed organization.

Although geographical dispersion is not uncommon for a DSA, coupled with the diversity, complexity, and budget of the assigned systems, this DSA warrants a two-star. The AMC Commodity Command one-star DSAs would be a stepping-stone to the two-star AESC DSA. It will be an organization that will require support from all AMC commodity commands to achieve system synergies — a task that will require strong and dynamic leadership.

No matter how it is organized, it is a paradigm shifter. The DSA for Force Projection and Maneuver Sustainment would be rated by the AESC Commander and senior rated by the AMC Commander. This could prompt the Secretary of the Army to appoint the AMC Commander as the Acquisition Executive for these assigned systems if a PEO designation was desired.

# FORCE PROJECTION CENTER OF EXCELLENCE

The Army also needs to create a consortium called "The Force Projection Center of Excellence (COE)" and have it chartered by the Chief of Staff of the Army. The Force Projection COE would report out twice a year to the Vice Chief of Staff of the Army on the progress, programming and budgeting aspects of the Army's force projection improvements. The COE would function as part of a Force Projection Council of Colonels (CoC) and General Officer Steering Committee (GOSC) construct. There are over 80 organizations that in some way participate in the force projection process and with no clear leader or forum for this critical strategic capability. While the membership would be primarily Army agencies, other key players from the other Services, DoD, and other federal agencies should be involved.

The Force Projection COE would serve to promote the Army's strategic agility objectives and goals in three important ways. First, it serves to develop, foster, and promote the cultural changes toward developing the Army's force projection and subsequent maneuver sustainment and distribution into Army Core Competencies. The new Field Manual 1 dances all around it, but 'Prompt Response' fails to address to the importance of getting to the fight or for the Army

possessing the capability to do such. It speaks of ends and ways, but not means.<sup>57</sup> It looks like its still an additional duty.

Second, it provides an open forum to review and plan all aspects of force projection activities to achieve interagency synergies, enhance communications, and to improve coordination and stewardship of scarce resources. The immediate benefits would be to find out who's doing what and how creating partnerships can leverage cooperation and improve communications. This would lead to reducing or eliminating duplicative efforts particularly in the R&D area within the Army, other Services, and agencies. It would provide better coordination on model and simulations, science and technology objective projects, concept evaluation programs, and advanced technology demonstrations to name a few. In short, promote and support value added efforts and help terminate the non-value added. A closer examination is required to look at those R&D efforts that only the names were changed to reflect linkage to Army Transformation. In reality, this popular tactic is often used to hide scarce R&D funding in small projects that have little valued added or cannot show linkage to an actual requirement.

Lastly, the Force Projection COE would create a stronger connection within the Army and the Joint Warfighter. This organization needs to build strong ties not only to the Navy, Marine Corps, Air Force, but also to the Joint Forces Command and the CINCs. The Army depends on these organizations to get the fight or operation and these same cannot achieve long term mission success without the Army.

# FORCE PROJECTION COUNCIL OF COLONELS

In response to Desert Storm's deployment problems, DCSLOG created the Power Projection Council of Colonels to focus ASMP. Great strides occurred in the program since then with numerous mobility projection platforms, CONUS and OCONUS, improved during this time. The total budget they influenced exceeded \$34 billion in the 1990's. With the new Army Vision, this council needs to refocus and renew its energies. First, change the name to reflect the new focus on Force Projection. Call the council the Force Projection Council of Colonels. Secondly, formally charter this organization and have it provide oversight to the Force Projection Center of Excellence. Third, build on its old ASMP focus and expand it to include the entire Force Projection and Maneuver Sustainment processes from the fort to the foxhole.

#### SUMMARY

Deterrence in a crisis generally involves signaling the United States' commitment or expressing its national interest by enhancing U.S. warfighting capability in the region. The United States' ability to respond rapidly and substantially as a crisis develops can have a significant deterrent effect.

William S. Cohen<sup>59</sup>

For Army Transformation to create irreversible momentum for change, the Army must invest in its future beyond the point of the spear. It requires a reallocation of the research and development effort to insure that enablers are there to project and sustain the Legacy, Interim, and Objective forces. Being lethal and survivable are useless if this capability cannot serve as a deterrent or get to the fight in a timely manner.

Commitment to transform is reflected in changes in Army organizations. History illustrates this well. The current Army Transformation is another one that requires vast organizational changes as it evolves to the Objective Force. Again change is not new, it just needs to happen.

Lastly, once the Army changes and reorganizes, it needs to practice and demonstrate its new strategic agility and galvanize the capability into a solid core competency. In other words, the Army needs to achieve or surpass the Navy, Marine Corps, and Air Force force projection competencies. Simulating it at the National Training Center does little to foster deterrence, nor does the cancellation of the four of the last five JLOTS exercises.<sup>60</sup>

It will take actual force projection exercises and joint partnerships with Marine Corps, Navy, and Air Force to hone these Army skills. The foundation is in place in many areas for these partnerships. For example the Army already has officer instructors on staff with Navy's Pacific Expeditionary Warfare Training Group for this purpose. Perhaps one day when CINC planners see Marine Corps Maritime Preposition Ships and Army Preposition Set, they will be on equal footing based on earned competence.

Decisive force can provide global deterrence and reassurance only if its force projection can be routinely and convincingly demonstrated. From a strategy perspective we are still moving in that direction as the way the United States will wage war as it protects itself, its interests, and its allies. The Army will become the central part of the Nation's military power when its strategic agility is recognized as the force of choice when joint decisive force operations are required. If nothing is done to improve the Army's strategic agility, given the new timelines, the Army will only be able to project into Canada or Mexico – if it road marches – maybe. Then the vision becomes only a wish.

WORD COUNT = 5974

# **ENDNOTES**

- <sup>1</sup> Danile J. Hughes, <u>Moltke on the Art of War, Selected Writings</u> (Novato, CA: Presido Press, 1993), 45.
- <sup>2</sup> Eric K. Shinseki, General, Chief of Staff, Army, "The Army Vision: Soldiers On Point for the Nation ... Persuasive in Peace, Invincible in War, October 2000," available from <a href="http://www.army.mil/armyvision/default.htm">http://www.army.mil/armyvision/default.htm</a>; Internet; 4 January 2001.
  - <sup>3</sup> Shinseki, 3.
- <sup>4</sup> Department of the Army, <u>United States Army Transformation Campaign Plan (TCP)</u>, draft plan (Washington, D.C.: Army Deputy Chief of Staff for Operations, 30 October 2000), 10.
  - <sup>5</sup> Shinseki, 4-5.
- <sup>6</sup> Department of Defense, <u>National Military Strategy</u> (Washington, D.C.: U. S. Department Of Defense, September, 1997), Executive Summary.
- <sup>7</sup> This use of 'power' verses 'force' projection predates the changing in definitions they now appear in Joint Pub 1.02.
  - <sup>8</sup> National Military Strategy, 19-20.
  - <sup>9</sup> Ibid. 16.
- <sup>10</sup> Michael Howard, Sir, "Lessons of the Cold War," <u>Survival</u> 36, no. 4, (Winter, 1994-95): 161-166.
  - <sup>11</sup> F.G. Hoffman, <u>Decisive Force</u> (Westport, CT: Praeger, 1996), 94.
  - <sup>12</sup> Hoffman, 99-100.
- <sup>13</sup> Department of Defense, <u>Joint Vision 2020</u> (Washington D.C.: U.S. Government Printing Office, June 2000), 2.
  - 14 Ibid.
- <sup>15</sup> Samuel M. Cannon, Colonel, "Perspectives of Force Projection Initiatives," briefing slides, Warren, MI, Project Manager, Force Projection, U.S. Army Tank-automotive Armaments Command, 9 January 2001, 9.
- <sup>16</sup> Department of Defense, <u>Doctrine for Logistics Support of Joint Operations</u>, Joint Publication 4-0 (Washington, D.C.: U. S. Department of Defense, 6 April 2000), I-11, I-12.
- <sup>17</sup> Department of the Army, <u>The Foundations of Army Transformation and The Objective Force Concept-Final Draft</u> (Fort Monroe, VA: U.S. Army Training and Doctrine Command, 17 January 2001, 38.

- <sup>18</sup> Department of Defense, <u>Joint Tactics, Techniques, and Procedures for Joint Reception, Staging, Onward Movement, and Integration, Joint Publication 4-01.8 (Washington, D.C.: U. S. Department of Defense, 13 April 2000), I-3, I-5.</u>
  - 19 Cannon, 3.
  - <sup>20</sup> Cannon, 18.
  - <sup>21</sup> Army Transformation Campaign Plan, 13.
  - <sup>22</sup> Ibid., 8.
  - <sup>23</sup> Cannon, 16.
- <sup>24</sup> Larry Harman, Colonel, "Logistics in the Army Transformation & the Objective Force," briefing slides, Fort Lee, VA, Director, CSS Battle Lab, U.S. Army Combined Arms Support Command, 6 February 2001, 13.
- Discussions concerning Army Transformation and the C-130 requirement took place between U. S. Army War College Students and Congressional Committee Staffers who specialize on Army matters. These discussions were conducted on a non-attribution basis as part of the D.C. Field Trip. It was clear that the staffers did not understand the complete rationale for the C-130 transportability requirement.
- <sup>26</sup> The ideas here are based on remarks made by several speakers participating in the Commandant's Lecture Series.
- <sup>27</sup> Christian Lowe, "Military Not Able To Meet Airlift Requirements For War," <u>Defense Week</u>, 18 December 2000, 1.
- <sup>28</sup> Daniel Page, Program Manager for the C-17 Follow-on Program, Boeing, interviewed by author, 23 February 2001, Long Beach, CA.
  - <sup>29</sup> Ibid.
  - <sup>30</sup> Christopher Miller, "Airships Rise Again," <u>Popular Science</u>, January 2001, 78-83.
- William G. Palmby, Lieutenant Colonel, "Ultra Large Airlifters," briefing slides, Washington, D.C., Joint Staff, J-4 Mobility Division, Department of Defense, 6 February, 2001, 8-9.
  - <sup>32</sup> "Army Deployability," <u>Inside the Army</u>, 8 January 2001, 1.
  - <sup>33</sup> Army Transformation Campaign Plan, 7.
- <sup>34</sup> Andy Marshall, "A Strategy For A Long Peace: A 'Quick Look' Assessment," briefing slides, Washington, D.C., Center for Strategic and Budgetary Assessments, Department of Defense, 12 February 2001

<sup>&</sup>lt;sup>35</sup> Inside the Army, 1.

<sup>&</sup>lt;sup>36</sup> Department of the Army, <u>The Foundations of Army Transformation and The Objective</u> Force Concept-Final <u>Draft</u>, 38.

<sup>&</sup>lt;sup>37</sup> CROP is a container roll-out platform. It's a slightly smaller version of the original PLS flatrack. The CROP can fit inside a standard shipping container where the flatrack cannot. The 463L system is the load handling system used by the USAF in its cargo planes and the Army in its CH47 Helicopters. It is uses the 463L pallet (88" x108") as its primary platform. However, it has less intermodal characteristics than the CROP does.

<sup>&</sup>lt;sup>38</sup> Department of the Army, <u>Brigade Combat Team Organization and Operations Concept - Revised Draft</u> (Fort Monroe, VA: U.S. Army Training and Doctrine Command, 18 April 2000), Chapter 10, 9-10.

<sup>&</sup>lt;sup>39</sup> Ibid., Chapter 10, 45-48.

<sup>&</sup>lt;sup>40</sup> Genaro J. Dellarocco, Major, <u>The Pallet Cradle</u>, Masters Thesis (Fort Leavenworth, KS: U.S. Army Command and General Staff College, 5 June 1992), iii.

<sup>&</sup>lt;sup>41</sup> Applicable tactical vehicles for the ALHS are PLS – palletized loading system; HEMTT – heavy expanded mobility tactical truck; MTV –medium tactical vehicle).

<sup>&</sup>lt;sup>42</sup> Engineer/Scientist Andy Garcia, Boeing Corp., interviewed by author, 23 February 2001, Long Beach, CA.

 $<sup>^{\</sup>rm 43}$  However, there is no R&D activity concerning modifying the PLS/HEMTT- LHS to handle 463L pallets.

<sup>44</sup> Garcia.

<sup>&</sup>lt;sup>45</sup> Tom Reinshagen, "Tactical Wheeled Vehicle Comparison," spreadsheets for the IBCT, Fort Eustis, U.S. Army Transportation School, 20 November 2000. There are 1005 vehicles in the OBCT. Of this amount, 242 vehicles would be suitable for the ALHS.

<sup>&</sup>lt;sup>46</sup> Donald G. Drummer, Lieutenant Colonel, An Assessment of Modeling and Simulation Tools for Force Projection, Strategic Research Project (Carlisle, Barracks, PA: U.S. Army War College, 3 April 2000), 15. Ken Foley, Branch Chief, Battle Lab Support Element, Deployment Process Management Office, interview by author, 28 November 2000, Fort Eustis, VA. Also, the ideas in this paragraph are based on remarks made by two speakers participating in the Commandant's Lecture Series.

<sup>&</sup>lt;sup>47</sup> Department of the Army, <u>Force Development and Requirements Determination</u>, TRADOC PAM 71-9 (Fort Monroe, VA: U.S. Army Training and Doctrine Command, 5 November 1999), Para 8-4.

<sup>48</sup> Cannon, 5.

- <sup>49</sup> This reflects the number different organizations found on the attendance roster for the Army Force Projection Center of Excellence Summit II held at Fort Eustis, VA, 26-27 October 2000.
- <sup>50</sup> Lieutenant General (ret.) Gus Pagonis, U.S. Army, interview by author, 16 January 2001, Sears Headquarters, Chicago, IL.
- <sup>51</sup> The ideas in this paragraph are based on remarks made by speaker participating in the Commandant Lecture Series and several other non-attribution forums at the U.S. Army War College.
- <sup>52</sup> General John G. Coburn, Commander of the U.S. Army Materiel Command General, interview by author at the Quartermaster Senior Service College Conference, 31 March 2001, Fort Belvoir, VA.
- <sup>53</sup> Author, "Army Transformation Proposal: The Army Expeditionary Support Command," briefing slides, Quartermaster Senior Service College Conference, Fort Belvoir, VA, 31 March 2001.
  - <sup>54</sup> Harman, 23
- <sup>55</sup> National Defense Panel, <u>Transforming Defense National Security in the 21<sup>st</sup> Century</u> (Arlington, VA: U.S. National Defense Panel, December 1997), 73.
- <sup>56</sup> William E. Mortensen, Major General, mortensenw@eustis.army.mil "Acquisition Transformation for the Army" electronic mail message to Lieutenant General Roy E. Beauchamp, rbeauchamp@hqamc.army.mil, 18 January 2001.
- <sup>57</sup> Department of the Army, <u>The Army</u>, Prototype Draft Field Manual 1, Version K (Washington, D.C.: U.S. Department of the Army, June 2000), 18.
  - 58 Cannon, 5.
- <sup>59</sup> William S. Cohen, Secretary of Defense, <u>Department of Defense Annual Report to the President and the Congress</u> (Washington, D.C.: U. S. Department Of Defense, 2001), Chapter 1, 8.
- <sup>60</sup> Captain Kenneth Butrym, USN, Commander of the 1<sup>st</sup> Amphibious Construction Battalion (Sea Bees), interview by author on Exercise 'Turbo Patriot 2000', 22 February 2001, Coronado, CA.
- <sup>61</sup> Captain Robert H. Howe, USN, Commander, Expeditionary Warfare Training Group Pacific, interview by author, 22 February 2001, Coronado, CA.

#### **GLOSSARY**

There is considerable confusion associated with the use of the terms 'force projection' and 'power projection,' as they pertain to improving the Army's strategic responsiveness. In the past, the terms were interchange. But now they are distinctly different. The Joint Staff recognized this fact several of years ago and established an official relationship. The definitions contained in Joint Publication 1-02, define force projection and its relationship to power projection as follows:

**Force projection**: the ability to project the **military element** of national power from the continental United States (CONUS) or another theater, in response to requirements for military operations. Force projection operations extend from mobilization and deployment of forces to the redeployment to CONUS or home theater.

Power projection: the ability of a nation to apply all or some of its elements of national power – political, economic, informational, or military – to rapidly and effectively deploy and sustain forces in and from multiple dispersed locations to respond to crises, to contribute to deterrence, and to enhance regional stability.

The bottom line is that, 'force projection' is just one component of 'power projection.' Force Projection is solely in the military lane; power projection is not. To claim that the military projects 'power' is in fact misleading and the new DoD leaders will no doubt correct this misuse, as they reestablish civilian authority over the military. The correct terminology is now emerging through the Joint Staff definitions. Accordingly, the Services project military power through their forces via force projection. The key point here is that force projection is the military component of national power projection abilities.

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